

## CURRICULUM VITAE

**1. Name Surname:** Didem KIVANÇ TÜRELİ

**2. Date of Birth:** 06.09.1973

**3. Department:** Electrical and Electronics Engineering

**4. Education:**

Degree	Department	University	Year
B.S.	Elektrik Elektronik Mühendisliği	Boğaziçi Üniversitesi	1994
M.S.	Elektronik Mühendisliği	University of Surrey	1995
Ph.D.	Elektrik Mühendisliği	University of Washington	2005

**5. Academic Titles:**

Title	Discipline	University	Year
Assistant Professor	Electrical and Computer Eng.	WVU Inst. of Technology, West Virginia, U.S.A.	2008
Assistant Professor	Electrical and Electronics Eng.	Okan University	2011
Associate Professor			
Professor			

**6. Supervised Master and Ph.D. Thesis:**

**6.1 Title of Master Thesis:**

**6.2 Dissertation Title:**

**7. Publications:**

**7.1 International Refereed Journal Publications:**

1. E. Zeydan, **D. Kivanc Tureli**, C. Comaniciu and U. Tureli, "Energy-Efficient Routing for Correlated Data in Wireless Sensor Networks," Elsevier Ad Hoc Networks, vol. 10, no. 6, pp. 962–975, Aug. 2012.
2. E. Zeydan, **D. Kivanc Tureli**, U. Tureli and C. Comaniciu, "Joint Iterative Beamforming and Power Adaptation for MIMO Ad Hoc Networks", EURASIP Journal on Wireless Communications and Networking 2011, 2011:79, 26 August 2011.
3. **D. Kivanc**, Guoqing Li and Hui Liu, "Computationally Efficient Bandwidth Allocation and Power Control for OFDMA" Transactions on Wireless Communications, vol. 2, no. 6, pp. 1150–1158, November 2003.

4. U. Tureli, **D. Kivanc** and Hui Liu, "Experimental and Analytical Studies on a High-Resolution OFDM Carrier Frequency Offset Estimator," IEEE Trans. on Vehicular Technology, vol. 50, no. 2, pp. 629–643, March 2001.

## 7.2 International Conference Presentations & Proceedings:

1. E. Zeydan, **D. Kivanc** and U. Tureli, "Iterative Beamforming and Power Control for MIMO Ad Hoc Networks", Proc. IEEE Global Communications Conference (GLOBECOM), Ad-Hoc and Sensor Networking Symposium, Miami, FL, November 2010.
2. U. Tureli, and **D. Kivanc**, "Joint Approximation of Localization and Path Exponent in a RSS System", Wireless Sensing, Localization, and Processing V Conference at the SPIE Symposium on Defense, Security and Sensing, Orlando, FL, April 2010.
3. E. Zeydan, **D. Kivanc** and U. Tureli, "Joint Iterative Power Control and Beamforming with Limited Feedback for MIMO Ad Hoc Networks," IEEE CISS 2010, Princeton, NJ, March 2010.
4. T. Kamakaris, **D. Kivanc** and U. Tureli, "Spatial and Spectral Radio Resource Enhancement for Urban Spectrum Reuse", in Proc. IEEE Personal Indoor and Mobile Communications (PIMRC) Sep. 2008, Cannes, France.
5. E. Zeydan, **D. Kivanc** and U. Tureli, "Unitary and Non-unitary Differential Space Frequency Coded OFDM" in Proc. of IEEE Wireless Communications and Networking Conference (WCNC'08), Las Vegas, NV, April 2008.
6. E. Zeydan, **D. Kivanc** and C. Comaniciu, "Efficient Routing for Correlated Data in Wireless Sensor Networks", Proc. IEEE Military Communications Conference (MILCOM), Orlando, FL, 2008.
7. V. Parikh, **D. Kivanc**, and U. Tureli, "Performance Analysis of CSMA and RI-BTMA in an Ad Hoc Network", Proc. IEEE CISS, Mar. 2008, Princeton, NJ.
8. E. Zeydan, **D. Kivanc**, and U. Tureli, "Cross Layer Interference Mitigation Using a Convergent Two Stage Game for Ad Hoc Networks", Proc. IEEE CISS, Mar. 2008, Princeton, NJ.
9. T. Kamakaris, **D. Kivanc** and U. Tureli, "Interference Model for Cognitive Coexistence in Cellular Systems", in Proc. IEEE Global Communications Conference (GLOBECOM) Nov. 2007, Washington, DC.
10. **D. Kivanc**, N. Patel and U. Tureli, "Effective Channel Utilization Using the MARI-BTMA Protocol", in Proc. IEEE Military Communications Conference (MILCOM), Oct. 2007, Orlando, FL.
11. E. Zeydan, **D. Kivanc**, and U. Tureli, "Joint Iterative Channel Allocation and Beamforming Algorithm for Interference Avoidance in Multiple-Antenna Ad Hoc Networks", in Proc. IEEE Military Communications Conference (MILCOM), Oct. 2007, Orlando, FL.
12. T. Kamakaris, **D. Kivanc** and U. Tureli, "Opportunistic Cellular Reuse in Cellular Systems", in Proc. IEEE Personal Indoor and Mobile Radio Communications Conference (PIMRC), Sep. 2007, Athens, Greece.
13. **D. Kivanc**, U. Tureli and H. Liu, "Fair Resource Allocation in an Uplink OFDMA System," in Proc. IEEE Wireless Communications and Networking Conference (WCNC'07), Hong Kong, March 2007.
14. N. Patel, **D. Kivanc** and U. Tureli, "The Effect of Frequency Offset on the Multiple Antenna Receiver Initiated Busy Tone Medium Access (MARI-BTMA) Protocol," in Proc. IEEE Military Communications Conference (MILCOM), Oct. 2006.
15. **D. Kivanc**, U. Tureli and Hui Liu, "Capacity Improvement for Uplink OFDMA," in Proc. 36<sup>th</sup> Asilomar Conference on Signals, Systems and Computers, vol. 2, pp. 1809-1812 Nov. 2002.

16. Y. Abdalla, **D. Kivanc** and Hui Liu, "PRMA with Reservation Subframe Protocol for Multimedia Services in Mobile Communication Networks," in Proc. IEEE Global Telecommunications Conference (Globecom), vol. 6, pp. 3538–3542, San Antonio, TX, Nov. 2001.
17. Y. Abdalla, **D. Kivanc** and Hui Liu, "PRMA with Reservation Subframe Protocol for Multimedia Services in Mobile Communication Networks," in Proc. Vehicular Technology Conference (VTC), vol. 2, pp. 802–806, Atlantic City, NJ, Oct. 2001.
18. U. Tureli, **D. Kivanc** and Hui Liu, "Multicarrier Synchronization with Diversity," in Proc. Vehicular Technology Conference (VTC), vol. 2, pp. 952–956, Atlantic City, NJ, Oct. 2001.
19. U. Tureli, **D. Kivanc** and Hui Liu, "Channel Estimation for Multicarrier CDMA," in Proc. Acoustics, Speech, and Signal Processing (ICASSP), vol. 5, pp. 2909–2912, Istanbul, Turkey, June 2000.
20. **D. Kivanc** and Hui Liu, "Subcarrier Allocation and Power Control for OFDMA," in Proc. 34<sup>th</sup> Asilomar Conference on Signals, Systems and Computers, vol. 1, pp. 147–151, Asilomar, CA, Oct. 2000.
21. U. Tureli, **D. Kivanc** and Hui Liu, "Subspace Based OFDM Carrier Offset Estimation Algorithm in Model Mismatch," in Proc. 34th Asilomar Conference on Signals, Systems and Computers, vol. 1, pp. 264–268, Asilomar, CA, Oct. 2000.
22. U. Tureli, **D. Kivanc** and Hui Liu, "MC-CDMA Uplink-blind Carrier Frequency Offset Estimation," in Proc. 34th Asilomar Conference on Signals, Systems and Computers, vol. 1, pp. 241–245, Asilomar, CA, Oct. 2000.
23. **D. Kivanc** and Hui Liu, "Uplink Performance of MC-CDMA in the Presence of Frequency Offset," in Proc. Vehicular Technology Conference (VTC), vol. 5, pp. 2855–2859, Amsterdam, Netherlands, Sept. 1999.
24. **D. Kivanc** and Hui Liu, "Blind Symbol Detection of Coded Sequences," in Proc. Conference on Information Sciences and Systems (CISS), Princeton, NJ, Mar. 1998.

### 7.3 International Books / Chapters of Books:

### 7.4 National Refereed Journal Publications:

### 7.5 National Conference Presentations & Proceedings:

1. U. Tureli ve **D. Kivanc**, Açık Alan Küçük Hücre LTE-A Ağlarda Veri Hızı ve İlişkilendirme, IEEE 22. Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SIU), Trabzon, 23-25 Nisan 2014.
2. U. Tureli, D. Ayıkol, **D. Kivanc Tureli**, "Coverage and throughput of heterogenous LTE-A network with biased BS association," IEEE Signal Processing and Communications Applications Conference (SIU), 2013.

### 7.6 National Books / Chapters of Books:

### 7.7 Other Publications:

### 8. Projects:

- Consultant, Tübitak, "GATAS Project." (2013-2015)
- PI, Division of Science & Research West Virginia Higher Education Policy Commission, "Sensor Network Development Kits for Curriculum Development." (\$10,283) (2009-2010)
- Researcher, "Multiradio wireless sensor networks", US Army- Wireless Network Security Program subcontract (2006-2008).
- Researcher, "Cognitive localization in wireless sensor networks", US Army- Wireless Network Security Program subcontract (2007-2008).

- Researcher, “NeTS: ProWiN: Programmable Radios: Platforms for Highly Dynamic Networks”, National Science Foundation (NSF), (2006-2007).
- Researcher, “NSF NeTS:ProWiN: Dynamic Intelligent Management of Spectrum for Ubiquitous Mobile Networks (DIMSUMnet)”, National Science Foundation (NSF), (2006-2007).

## 9. Administrative Tasks:

## 10. Memberships in Scientific and Professional Organizations

- IEEE member, 1997 – present.

## 11. Awards

- University of Washington Outstanding Graduate Research Assistant, 2002

## 12. Undergraduate and graduate courses taught in the last two years:

Academic Year	Semester	Name of the Course	Hours per Week		Number of Students
			Theory	Lab	
2011-2012	Fall	EEE 403 Digital Signal Processing	2	2	16
		EEE 307 Analog Communications	3		30
		MATH 265 Probability and Statistics	3		47
	Spring	EEE 306 Digital Communications	3	2	18
		EEE 454 Digital Systems and Filters	3		5
		IE 202 Statistics for Engineering	3		28
2012-2013	Fall	EEE 403 Digital Signal Processing	2	2	41
		EEE 307 Analog Communications	3		49
		EEE 203 Introduction to Matlab		2	50
		MATH 265 Probability and Statistics	3		41
	Spring	EEE 306 Digital Communications	3	2	45
		EEE 454 Digital Systems and Filters	3		32
		ECE 506 Embedded Systems	3		10
2013-2014	Fall	EEE 403 Digital Signal Processing	2	2	51
		EEE 307 Analog Communications	3		20
		EEE 307 Analog Communications	3		27